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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,895	01/21/2004	Boris Y. Tsirline	3042	1894

31424 7590 09/18/2006

BABCOCK IP LLC
24154 LAKESIDE DRIVE
LAKE ZURICH, IL 60047

EXAMINER	
LE, UYEN CHAU N	

ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,895	TSIRLINE ET AL.	
	Examiner	Art Unit	
	Uyen-Chau N. Le	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12 and 14-35* is/are pending in the application.

4a) Of the above claim(s) *1-9 and 17-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10,12,14-16 and 27-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/08/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Requesting Continued Examination (RCE)

1. Receipt is acknowledged of the Requesting Continued Examination (RCE) field 08/08/2006.

Claim Objections

2. Claims 10, 12, 27, 29, 30, 31-33 and 35 are objected to because of the following informalities:

Re claim 10, line 1: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 12, line 2: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 27, line 7: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 29, line 4: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 30, line 4: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 31, line 4: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 32, line 3: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 33, line 3: Substitute "UHF" with -- ultra high frequency (UHF) --.

Re claim 35, line 2: Substitute "UHF" with -- ultra high frequency (UHF) --.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 10, 12, 14-16, 27-30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti et al (US 6409401 B1) in view of Wuidart et al (US 7023391 B2).

Re claims 10, 12, 14-16, 27-30 and 35: Petteruti et al discloses a system comprising an antenna 23 and RFID encoder 22, which serves as a transceiver adapted to communicate with a single transponder 16a located in a predetermined transponder operating region; the system configured to establish at predetermined transceiver power levels a mutual coupling which is selective exclusively for the single transponder located in the transponder operation region; transporting a web of labels through the transponder operating region, at least some of which labels have an RFID transponder, and wherein the method includes printing on said labels via print head 18; incrementally advancing the transponder within the transponder operating region, if the transponder is located at a field strength gap of the transponder operating region (i.e., via gap sensor 29); positioning a transponder in a transponder operating region with a transponder axis oriented along a predetermined direction (i.e., printing direction), the smallest dimension of the transponder in the predetermined direction being significantly less than a dimension of the transponder operating region in the predetermined direction (figs. 1-2; col. 2, line 46 through col. 4, line 32).

Petteruti et al is silent with respect to an ultra high frequency (UHF) near field coupler having a plurality of electrically parallel lines coupled to an unmatched load.

Wuidart et al teaches an antenna 30, which serves as a near field coupler, having a plurality of electrically parallel inductances [L11-L14], which serves as transmission lines, coupled to an unmatched load (i.e., resistor R_1) (fig. 3B; col. 1, lines 5-27; col. 3, lines 8-48; col. 4, lines 35-46; col. 5, lines 6-16; and col. 7, lines 32-45). Wuidart et al further discloses "as an alternative, an antenna according to the present invention may be assembled in a series oscillating circuit, resistor R1 then being in series with capacitor C1' and antenna 30 (that is, the parallel connection of inductances L11, L12, L13, and L14). A parallel or series oscillating circuit may be provided according to whether a current or voltage control is provided. The choice will be made, for example, according to the required excitation power" (col. 5, lines 9-15). Furthermore, "the present invention is likely to have various alterations, modifications, and improvements, which will readily occur to those skilled in the art. In particular, the *geometric sizing and the value of the inductances will be chosen according to* the application and, in particular, to *the desired range and to the desired excitation frequencies and powers*" (col. 6, lines 39-52). Accordingly, the system can be served as UHF near

field coupler if geometric sizing and the value of inductances are chosen in accordance to the range of ultra high frequency.

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ the parallel inductances of Wuidart et al into the system as taught by Petteruti et al in order to enhance the range and/or the signal level available at a given distance from the read/write transponder terminal. Furthermore, such modification would improve homogeneity of the magnetic field generated by the transponder read/write terminal.

6. Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petteruti et al as modified by Wuidart et al as applied to claims 10, 12 and 27 above, and further in view of Meier (US 5,294,931). The teachings of Petteruti et al as modified by Wuidart et al have been discussed above.

Re claims 31-34: Petteruti et al/Wuidart et al has been discussed above but is silent with respect to confirming a valid communication, determining the power level operationally effective to communicate with the transponder respectively.

Meier teaches a single interrogation device interrogates a plurality of transponders arranged within the range of transmission of the interrogation device and identifies them without any mutual interference comprises determining the power level operationally

effective to communicate with each transponder to confirm a valid communication (col. 2, line 30 through col. 3, line 10).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Meier into the system as taught by Petteruti et al/Wuidart et al in order to provide Petteruti et al/Wuidart et al with the ability of confirming a valid communication base on a determined power level, preventing interference and thus providing a more accurate system.

Response to Arguments

7. Applicant's arguments filed 03/02/2006 have been fully considered but they are not persuasive.

8. In response to applicant's argument that "…the cited references fail to disclose a UHF near field coupler having a plurality of electrically parallel lines, the electrically parallel lines commonly coupled in series to an unmatched load…" (page 14), the Examiner respectfully request the Applicant to further review Wuidart wherein "as an alternative, an antenna according to the present invention may be assembled in a series oscillating circuit, resistor R1 then being in series with capacitor C1' and antenna 30 (that is, the parallel connection of inductances L11, L12, L13, and L14)" (col. 5, lines 9-13) and "the *geometric sizing and the value*

of the inductances will be chosen according to the application and, in particular, to *the desired range and to the desired excitation frequencies and powers"* (col. 6, lines 39-52). Accordingly, the claimed limitation, given the broadest reasonable interpretation, Petteruti et al in view of Wuidart et al meets the claimed invention (see the rejection above).

Response to Amendment

9. The affidavit under 37 CFR 1.132 filed 08/08/2006 is insufficient to overcome the rejection of claims 10-16 and 27-35 based upon 103(a) rejection as set forth in the last Office action because: showing is not commensurate in scope with the claims ((i.e., resistance R1 coupled between ground and the microstrip line(s), is different from the characteristic impedance of the line create a mismatch which causes (L1, C1) through (Ln, Cn) to form a standing wave along the microstrip line that only simulates an equal to R1 impedance at the UHF operational frequency) (p. 3, item 10)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on maxi-flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Uyen-Chau N. Le
Primary Examiner
Art Unit 2876

September 13, 2006